

In the Office Action of February 6, 2003, Claims 1, 3 - 8, 11 and 12 were rejected. No claim was allowed. In response, Claims 1, 3, 6, 7 and 8 are amended and Claims 4, 12, and 13

Reexamination and reconsideration are respectfully requested in view of the foregoing amendments and the following remarks.

#### **Amendment to the Specification**

The Examiner requested new application papers with lines double spaced on good quality paper. In response, the specification is amended to provide replacement paragraphs for the paragraphs on pages 1 - 4 of the specification. The only change from the original text is that the lines are double spaced.

#### **Objection to the Claims**

Claims 3 and 4 were objected to on the alleged grounds that the word "nitrided" should be "nitrated".

In response, the phases containing "nitrided" are deleted from the claims.

Accordingly, it is respectfully submitted that this objection is overcome.

#### **Rejection of Claims 6, 7, 8 and 12 under 35 U.S.C. §112, second paragraph**

Claims 6, 7, 8 and 12 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. In particular, the Examiner alleges that Claims 6 and 7 contain improper Markush groups and terms such as "in particular" or "such as".

The Examiner alleges that Claim 12 recites a use, but does not recite any method steps.

In response, Claims 6 and 7 are amended to contain proper Markush groups and to delete optional language.

Claim 12 is canceled.

Accordingly, it is respectfully submitted that all of the rejections of Claims 6, 7, 8 and 12 under 35 U.S.C. §112, second paragraph, are overcome.

**Rejection of Claim 1, 3 and 6 - 8 under 35 U.S.C. §103(a) over Heinzelmann**

**Rejection of Claim 1, 3 and 6 - 8 under 35 U.S.C. §103(a) over Heinzelmann in view of Petrick**

**Rejection of Claim 1, 3 - 8 and 11 under 35 U.S.C. §103(a) over Hagel and Hagel**

**Rejection of Claim 1, 3 - 8 under 35 U.S.C. §103(a) over Hagel in view of Petrick and Hagel**

Claims 1, 3 and 6 - 8 were rejected under 35 U.S.C. §103(a) over Heinzelmann (U.S. Patent No. 3,682,727). The Office Action alleges that Heinzelmann discloses an igniter composition that can comprise boron as the reducing agent, potassium nitrate as the oxidizer, nitrocellulose as the secondary explosive, and polyurethanes the binder. The Examiner acknowledges that there is not a specific example of these specific ingredients and that there is no mention of laser ignition, but the Examiner takes the position that it would have been obvious to vary the ingredients disclosed by Heinzelmann in order to optimize the performance of the igniter.

Claims 1, 3 and 6 - 8 were rejected under 35 U.S.C. §103(a) over Heinzelmann (U.S. Patent No. 3,682,727) in view of Petrick (U.S. Patent No. 5,421,264). The Office Action alleges that Heinzelmann discloses an igniter composition that can comprise boron as the reducing agent, potassium nitrate as the oxidizer, nitrocellulose as the secondary explosive, and polyurethanes the binder. The Examiner acknowledges that there is not a specific example of these specific ingredients and that there is no mention of laser ignition, but alleges that Petrick teaches primer compositions that are ignitable by laser and suggests that any suitable primer can be used with laser ignition. The Examiner takes the position that it would have been obvious to vary the ingredients disclosed by Heinzelmann in order to optimize the performance of the igniter and that it would have been obvious to use laser ignition with the composition of Heinzelmann since Petrick suggests that any primer can be used with laser ignition.

Claims 1, 3 - 8 and 11 were rejected under 35 U.S.C. §103(a) over Hagel (U.S. Patent No. 4,956,029) and Hagel (U.S. Patent No. 4,363,679). The Office Action alleges that Hagel et al('029) discloses an igniter composition that can comprise zinc peroxide as the oxidizing agent, polynitropolyphenylene or nitrated aromatic polyethers as the secondary explosive, and magnesium as the reducing agent and that the composition can also include binders. The Examiner acknowledges that there is not a specific example of these specific ingredients, there is no mention of laser ignition and the mixing and pressing is not disclosed. The Examiner alleges that Hagel et al('679) teaches an igniter composition that is mixed and pressed. The Examiner takes the position that it would have been obvious to vary the ingredients disclosed by Hagel('029) in order to optimize the performance of

the igniter and that it would have been obvious to prepare the igniters of Hagel et al('029) by mixing and pressing as suggested by Hagel et al('679) since it is suggested that the pressing produces a more violent reaction.

Claims 1, 3 and 6 - 8 were rejected under 35 U.S.C. §103(a) over Hagel '029 in view of Petrick and Hagel '679. The Office Action alleges that Hagel ('029) discloses an igniter composition that can comprise zinc peroxide as the oxidizing agent, polynitropolyphenylene or nitrated aromatic polyethers as the secondary explosive, and magnesium as the reducing agent and that composition can also include binders. The Examiner acknowledges that there is not a specific example of these specific ingredients, that there is no mention of laser ignition and that the mixing and pressing is not disclosed. The Examiner alleges that Petrick teaches primer compositions that are ignitable by laser and suggests that any suitable primer can be used with laser ignition and that Hagel ('679) teaches an igniter composition that is mixed and pressed. The Examiner takes the position that it would have been obvious to vary the ingredients disclosed by Heinzelmann in order to optimize the performance of the igniter, that it would have been obvious to use laser ignition with the composition of Heinzelmann since Petrick suggests that any primer can be used with laser ignition and that it would have been obvious to prepare the igniters of Hagel et al ('029) by mixing and pressing as suggested by Hagel ('679) since it is suggested that the pressing produces a more violent reaction.

These rejections are traversed. As acknowledged by the Examiner, the references do not teach the specific compositions of the present invention. Heinzelmann, Hagel '029 and Hagel '679 contain no teachings relevant to laser ignition. Petrick, while disclosing laser ignition, does not provide any guidance for

selecting or optimizing ignition compositions for laser ignition.

Accordingly, it is respectfully submitted that Claims 1, 3 - 10 would not have been obvious over Heinzelmann, Petrick, Hagel '029 or Hagel '679, alone or in combination.

### **Conclusion**

In view of the foregoing amendments and remarks, it is respectfully submitted that Claims 1, 3 and 5 - 10 are in condition for allowance. Favorable reconsideration is respectfully requested.

Should the Examiner believe that anything further is necessary to place this application in condition for allowance, the Examiner is requested to contact applicants' undersigned attorney at the telephone number listed below.

Kindly charge any additional fees due, or credit overpayment of fees, to Deposit Account No. 01-2135 (306.36690CC2).

Respectfully submitted,  
ANTONELLI, TERRY, STOUT & KRAUS

  
\_\_\_\_\_  
Ralph T. Webb  
Reg. No. 33,047

RTW/RTW  
(703)312-6600